

A070us.txt

SEQUENCE LISTING

<110> BIOGEN, INC.
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SCHNEIDER, Pascal

<120> BAFF, Inhibitors Thereof and Their Use
in the Modulation of B-Cell Response

<130> A070 US

<150> 60/117,169
<151> 1999-01-25

Q<150> 60/143,228
<151> 1999-07-09

P<150> PCT/US00/01788
<151> 2000-01-25

<160> 22

= <170> FastSEQ for Windows Version 4.0

Q<210> 1
S<211> 218
P<212> PRT
H<213> Homo Sapien

<400> 1
Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu
1 5 10 15
Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro
20 25 30
Arg Lys Glu Ser Pro Ser Val Leu Leu Ser Cys Cys Leu Thr Val Val
35 40 45
Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
50 55 60
Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Lys
65 70 75 80
Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn Ser
85 90 95
Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln Asp
100 105 110
Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly

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115	120	125
Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala		
130	135	140
Leu Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His		
145	150	155
Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu		
165	170	175
Val Thr Leu Phe Arg Cys Ile Gln Asn Leu Glu Glu Gly Asp Glu Leu		
180	185	190
Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu Asp Gly Asp		
195	200	205
Val Thr Phe Phe Gly Ala Leu Lys Leu Leu		
210	215	

<210> 2

<211> 232

<212> PRT

<213> Murine

<400> 2

Met Asp Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys		
1 5 10 15		
Ser Glu Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro		
20 25 30		
Gln Lys Glu Glu Gly Ala Val Leu Leu Ser Ser Ser Phe Thr Ala Met		
35 40 45		
Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu Arg		
50 55 60		
Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala Lys		
65 70 75 80		
Leu Leu Thr Pro Ala Ala Pro Arg Pro His Asn Ser Ser Arg Gly His		
85 90 95		
Arg Asn Arg Arg Ala Phe Pro Gly Pro Glu Glu Thr Glu Gln Asp Val		
100 105 110		
Asp Leu Ser Ala Pro Pro Ala Leu Arg Asn Ile Ile Gln Asp Cys Leu		
115 120 125		
Gln Leu Ile Ala Asp Ser Asp Thr Pro Thr Ile Arg Lys Gly Thr Tyr		
130 135 140		
Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu Tyr		
145 150 155 160		
Ser Gln Val Leu Tyr Thr Asp Pro Ile Phe Ala Met Gly His Val Ile		
165 170 175		
Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr		
180 185 190		
Leu Phe Arg Cys Ile Gln Asn Leu Glu Glu Gly Asp Glu Ile Gln Leu		
195 200 205		
Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr		
210 215 220		
Phe Phe Gly Ala Leu Lys Leu Leu		
225 230		

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<210> 3
<211> 102
<212> PRT
<213> Homo Sapien

<400> 3
Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr
1 5 10 15
Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys
20 25 30
Arg Gly Ser Ala Leu Glu Glu Lys Tyr Gly Gln Val Leu Tyr Thr Asp
35 40 45
Lys Thr Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val
50 55 60
Phe Gly Asp Glu Leu Ser Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala
65 70 75 80
Lys Leu Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn
85 90 95
Ala Gln Ile Ser Leu Asp
100

30
<210> 4
<211> 96
<212> PRT
<213> Homo Sapien

<400> 4
Lys Gln His Ser Val Leu His Leu Val Pro Ile Asn Ala Thr Ser Lys
1 5 10 15
Asp Asp Ser Asp Val Thr Glu Val Met Trp Gln Pro Ala Leu Arg Arg
20 25 30
Gly Arg Gly Leu Gln Ala Gln Tyr Ser Gln Val Leu Phe Gln Asp Val
35 40 45
Thr Phe Thr Met Gly Gln Val Val Ser Arg Glu Gly Gln Gly Arg Ala
50 55 60
Tyr Asn Ser Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp
65 70 75 80
Ile Leu Ser Val Ile Ile Pro Arg Ala Arg Ala Lys Leu Asn Leu Ser
85 90 95

<210> 5
<211> 104
<212> PRT
<213> Homo Sapien

<400> 5
Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln Ala Glu Gly
1 5 10 15
Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu Ala Asn Gly
20 25 30
Val Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr His

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35	40	45
Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr		
50	55	60
Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly		
65	70	75
Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg		
85	90	95
Pro Asp Tyr Leu Asp Phe Ala Glu		
100		

<210> 6
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 <212> PRT
 <213> Homo Sapien

<400> 6			
Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser			
1	5	10	15
Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Leu Ser Gly			
20	25	30	
Val Lys Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys Asn Asn Leu			
35	40	45	
Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Met			
50	55	60	
Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu Thr Ser Ala			
65	70	75	80
Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu			
85	90	95	
Glu			

<210> 7
 <211> 102
 <212> PRT
 <213> Homo Sapien

<400> 7			
Thr Leu Lys Pro Ala Ala His Leu Ile Gly Asp Pro Ser Lys Gln Asn			
1	5	10	15
Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg Ala Phe Leu Gln Asp Gly			
20	25	30	
Phe Tyr Ser Gln Val Val Phe Ser Gly Lys Ala Tyr Ser Pro Lys Ala			
35	40	45	
Thr Ser Ser Pro Leu Tyr Leu Ala His Glu Val Gln Leu Phe Ser Ser			
50	55	60	
Gln Tyr Pro Phe Pro Trp Leu His Ser Met Tyr His Gly Ala Ala Phe			
65	70	75	80
Gln Leu Thr Gln Gly Asp Gln Leu Ser Thr His Thr Asp Gly Ile Pro			
85	90	95	
His Leu Val Leu Ser Phe			
100			

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<210> 8
<211> 109
<212> PRT
<213> Homo Sapien

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<400> 8
Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr Asp Ile Pro
      5          10          15
1
Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His Asp Arg Gly
      20          25          30
2
Trp Gly Lys Ile Ser Asn Met Tyr Ala Asn Ile Cys Phe Arg His His
      35          40          45
3
Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln Leu Met Val Tyr
      50          55          60
4
Val Thr Lys Thr Ser Ile Lys Ile Pro Ser Glu Phe His Phe Tyr Ser
      65          70          75          80
5
Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ser Gly Glu Glu Ile Ser
      85          90          95
6
Ile Glu Val Ser Asn Pro Ser Leu Leu Asp Pro Asp Gln
      100         105
7

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> <210> 9
> <211> 26
> <212> DNA
> <213> Homo Sapien

<400> 9
actgtttctt ctggaccctg aacggc
26

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<210> 10
<211> 30
<212> DNA
<213> Homo Sapien
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<400> 10
gacaagcttg ccaccatgga tgactccaca
30

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<210> 11
<211> 23
<212> DNA
<213> Homo Sapien
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<400> 11
actagtcaca gcagtttcaa tgc
 23
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<210> 12
<211> 22

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<212> DNA
<213> Homo Sapien

<400> 12
ctgcagggtc cagaagaaac ag
22

<210> 13
<211> 24
<212> DNA
<213> Homo Sapien

<400> 13
ggagaaggca actccagtca gaac
24

<210> 14
<211> 24
<212> DNA
<213> Homo Sapien

14
<400> 14
caattcatcc ccaaagacat ggac
24

15
<210> 15
<211> 22
<212> DNA
<213> Homo Sapien

15
<400> 15
tcggaacaca acgaaacaag tc
22

16
<210> 16
<211> 26
<212> DNA
<213> Homo Sapien

<400> 16
cttctccttc acctggaaac tgactg
26

17
<210> 17
<211> 19
<212> DNA
<213> Homo Sapien

<400> 17
ggcatcgtga tggactccg
19

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<210> 18
<211> 19
<212> DNA
<213> Homo Sapien

<400> 18
gctggaaggt ggacagcga
19

<210> 19
<211> 35
<212> DNA
<213> Homo Sapien

<400> 19
taagaatgcg gccgcggaat ggatgagtct gcaaa
35

<210> 20
D<211> 35
S<212> DNA
E<213> Homo Sapien

<400> 20
taagaatgcg gccgcgggat cacgcactcc agcaa
35

<210> 21
D<211> 21
S<212> DNA
E<213> Homo Sapien

<400> 21
gcagtttcac agcgatgtcc t
21

<210> 22
<211> 21
<212> DNA
<213> Homo Sapien

<400> 22
gtctccgttg cgtgaaatct g
21